

LAB. No. 140-3436

CITY OF LOS ANGELES
DEPARTMENT OF GENERAL SERVICES
STANDARDSRef. No.: 02599
12201 Sherman Way
Van Nuys
Fleet Services Repair
Facilities
W.O. No.

REC'D 8-21-88

2319 DORRIS PLACE
LOS ANGELES, CA 90031
485-2242

REP'T'D 11-28-88

TO Randall Bacon, General Manager

Dept. of General Services

ATTN: Joe Trevgoda

CC: Harold Cain

Rec
12-7-88
(RC)

Report of

SUBSURFACE INVESTIGATION

Submitted are the results of the subsurface investigation performed on the above named project by Standards, as requested by Mr. Harold Cain of Fleet Services in your department. The logs of the test holes and the results of the laboratory tests requested are a part of this report. A site plan is included to show test hole locations relative to the petroleum products storage facilities. The descriptions reported on the "Log of Test Hole" sheets are based on the Unified Soil Classification system using field identification procedures.

This investigation was performed in accordance with the specific instructions relative to test hole numbers, location, depth, type of samples obtained and laboratory tests performed, as mentioned in the Fleet Services' correspondence dated August 29, 1988. Standards Division was not requested to participate in the planning of the investigation nor presenting any conclusions that may be drawn from the results. Originally, two test holes were planned for this project site. The additional test hole (T.H.3) and location was suggested by Standards and approved by Fleet Services representatives. The test holes were reportedly located in areas suspected of containing subsurface soil contamination (see Test Hole Location Map.)

The test holes were drilled with a truck mounted Central Mine Equipment Model 55 drill rig using six inch diameter flight augers. The augers were steam cleaned prior to drilling each test hole. Ground water was not encountered in any of the drilled holes. Our records of previous subsurface investigations indicate that ground water in the vicinity of the project site is more than two hundred feet below ground surface.

Undisturbed soil samples were obtained from all the test holes with a 3-1/2" O.D. by 3" I.D. split spoon sampler. The sampler was lined with 2-7/8" I.D. by 6" length brass sleeves. A new set of brass sleeves was used for each sample. All brass sleeves were cleaned with Trisodium Phosphate (TSP) solution prior to sampling. All the samples were properly sealed, immediately packed in ice, and transported to the

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Subsurface Investigation Rpt. - cont.

Nov. 28, 1988

laboratory for testing. At the laboratory the samples were kept at 4°C temperature until they were tested.

The laboratory test results indicate that the soil is free from contamination by volatile organic chemicals and contains negligible amounts of total recoverable petroleum hydrocarbons (less than 5.0 mg/hg, which is the detection limit of the testing equipment - see attached laboratory report.)



RONALD W. CLARK, DIVISION HEAD
General Services/Standards Division

RWC/PKH/bh

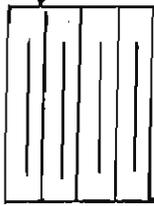


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Test Hole Location (No scale)



Storm Drain
Facility




T.H. 1

Secondary Oil
and Chemical
Storage Area

Easterly Property Line
(Wall)



Primary Oil
and Chemical
Storage Area

Empty Oil Drum
Storage Area


T.H. 2


T.H. 3

Southerly Property Line
(Wall)



Southeast Corner, N. Hollywood Repair Shop

12201 Sherman Way

LOG OF TEST HOLE NO. 3

DRILLED: 10-6-88

CITY OF LOS ANGELES
BUREAU OF STANDARDS

DRILL RIG: CME-55 USING 6" DIAMETER AUGER

LOCATION: 15' N/o Sly P (Concrete Wall) & 25' W/o Ely P (Concrete Wall)

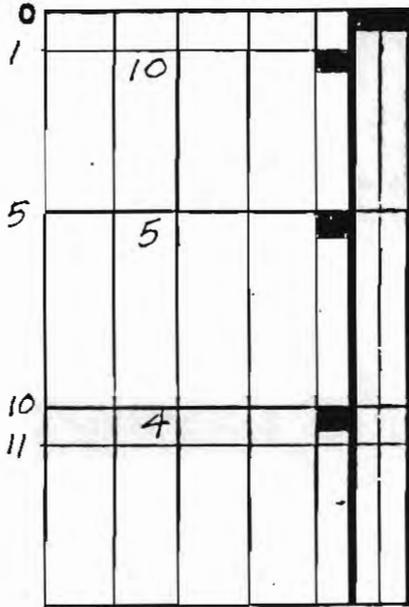
ELEVATION:

BY: McElroy

UNIFIED
SOIL
CLASSIF.

VERTICAL SCALE: 1" = 5'

FIELD DESCRIPTION



7" AC payement (poor condition) overlying brownish tan poorly graded fine to medium grained sand with some silt and clay fines. Slgightly damp and dense. Some 1/2" to 3/4" size subrounded gravel at 1 ft, increasing slightly at 3 ft and below. Sand slightly finer and silt increasing at 5 1/2 ft and below. No odor

SP to
SP-SM

NO WATER

LOG OF TEST HOLE NO.

DRILLED:

DRILL RIG:

LOCATION:

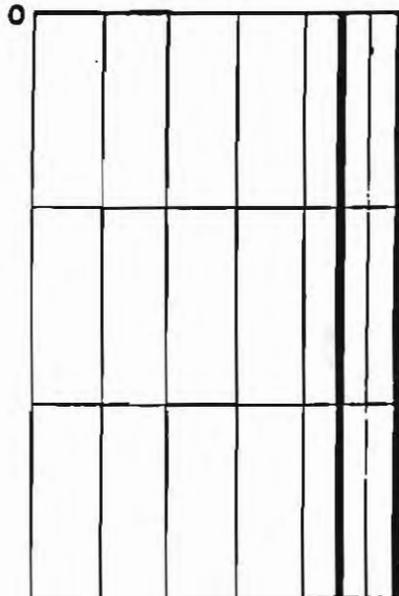
ELEVATION:

BY:

UNIFIED
SOIL
CLASSIF.

VERTICAL SCALE: 1" = 5'

FIELD DESCRIPTION



Depth in Feet

Samples

- Represent
- Shelby
- Split Spoon
- Piston

Press. —
Count. —
dens. —
Moist —
tes —

LAB. No. J8570-128 to 136 incl

CITY OF LOS ANGELES
DEPARTMENT OF GENERAL SERVICES
STANDARDS

REC'D 10-6-88

REPT'D 11-23-88

TO Mr. Randall C. Bacon, Gen. Mgr.

2319 DORRIS PLACE
LOS ANGELES, CA 90031
485-2242

Department of General Services

Attn: Mr. Harold Cain

*Data analyzed?*SUBSURFACE INVESTIGATION, 12201 SHERMAN WAY

At the request of Fleet Services, Department of General Services, nine soil samples were tested for chemical contamination.

The soil samples were obtained on October 6, 1988 by Standards' Drill Crew from from the North Hollywood Fleet Services Facility located at 12201 Sherman Way.

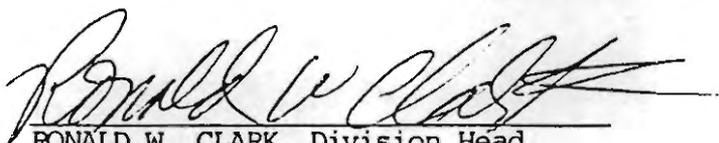
<u>Lab. No.</u>	<u>Sample Identification</u>
128	Hole #1 Depth 1'
129	Hole #1 Depth 5'
130	Hole #1 Depth 10'
131	Hole #2 Depth 1'
132	Hole #2 Depth 5'
133	Hole #2 Depth 10'
134	Hole #3 Depth 1'
135	Hole #3 Depth 5'
136	Hole #3 Depth 10'

The samples were tested for the presence of volatile organic chemicals by EPA Method 8240* and for Total Petroleum Hydrocarbons by EPA Method 9071.

The soil samples were found to be essentially clear of any chemical contamination. See the attached data sheet.

* See the attached Quality Control Data sheets.

NOTE: Several aspects of the quality control tests that were conducted on this batch of samples were outside of the control limits.



RONALD W. CLARK, Division Head
General Services/Standards

RWC:DAT:MV:fi

2/15/89
David Thomas - Sr. Chemist
Lab. Not certified by
SDDHS ✓

TEST DATA

Volatile Organics, Method 8240

All nine samples were analyzed for the following chemical none of which were detected in any of the samples.

<u>CAS No.</u>	<u>Chemical</u>	<u>Minimum Detection Limit (ug/Kg)</u>
75-09-2	Methylene Chloride .	17
75-35-4	1,1-Dichloroethane	4
67-66-3	Chloroform	2
71-55-6	1,1,1-Trichloroethane	4
71-43-2	Benzene	1
78-87-5	1,2-Dichloropropane	1
79-01-6	Trichloroethene	2
75-25-2	Bromoform	25
108-88-3	Toluene	0.5
127-18-4	Tetrachloroethene	19
108-90-7	Chlorobenzene	0.5
100-41-4	Ethyl Benzene	1
95-47-6	O-Xylene	2
79-34-5	1,1,2,2-Tetrachloro Ethane	19

Total Recoverable Petroleum Hydrocarbons, Method 9071

<u>Lab. No.</u>	<u>TRPH, mg/Kg</u>	<u>% Water in Sample</u>
128	Less than 5.0	6.6
129	Less than 5.0	7.3
130	Less than 5.0	4.3
131	Less than 5.0	5.5
132	Less than 5.0	6.8
133	Less than 5.0	7.0
134	Less than 5.0	7.2
135	Less than 5.0	14.6
136	Less than 5.0	15.0

SOIL MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

Case No. Lab #J8570-128 to 136 Laboratory Name Standards/Dept. of General Services

FRACTION	COMPOUND	CONC. SPIKE ADDED (ug/Kg)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	OC LIMITS	
									RPD	RECOVERY
VOA SAMPLE NO.	1,1-Dichloroethene	21.5	0.0	4.4	20.5				22	59-172
	Trichloroethene	27.5	0.0	6.9	25.1				24	82-137
	Chlorobenzene	26.7	0.0	14.0	52.4				21	80-133
	Toluene	20.3	0.0	9.9	48.8				21	59-139
	Benzene	20.5	0.0	39.0	190.2				21	66-142
B/N SAMPLE NO.	1,2,4-Trichlorobenzene								23	38-107
	Acenaphthene								19	31-137
	2,4 Dinitrotoluene								47	28-89
	Di-n-Butylphthalate								47	29-135
	Pyrene								36	35-142
ACID SAMPLE NO.	N-Nitrosodi-n-Propylamine								38	41-126
	1,4-Dichlorobenzene								27	28-104
	Pentachlorophenol								47	17-109
	Phenol								35	26-90
	2-Chlorophenol								50	25-102
PEST SAMPLE NO.	4-Chloro-3-Methylphenol								33	26-103
	4-Nitrophenol								50	11-114
	Lindane								50	46-127
	Heptachlor								31	35-130
	Aldrin								43	34-132
PEST SAMPLE NO.	Dieldrin								38	31-134
	Endrin								45	42-139
	4,4'-DDT								50	23-134

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ADVISORY LIMITS

RPD: VOAs _____ out of _____; outside OC limits
 B/N _____ out of _____; outside OC limits
 ACID _____ out of _____; outside OC limits
 PEST _____ out of _____; outside OC limits

RECOVERY: VOAs 4 out of 5; outside OC limits
 B/N _____ out of _____; outside OC limits
 ACID _____ out of _____; outside OC limits
 PEST _____ out of _____; outside OC limits

Comments: _____

GC/MS TUNING AND MASS CALIBRATION

Bromofluorobenzene (BFB)

Case No. L#J8570-128 to 136 Laboratory Name Standards/Dept. of General Services

Instrument ID GC/MS Date 10-21-88 Time 1:30 PM

Data Release Authorized By: _____

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE	
50	15.0 - 40.0% of the base peak	17.2	
75	30.0 - 60.0% of the base peak	55.4	
95	Base peak, 100% relative abundance	100	
96	5.0 - 9.0% of the base peak	6.6	
173	Less than 1.0% of the base peak	0.	
174	Greater than 50.0% of the base peak	55.9	
175	5.0 - 9.0% of mass 174	4.1	(7.3) ¹
176	Greater than 95.0%, but less than 101.0% of mass 174	54.5	(97.5) ¹
177	5.0 - 9.0% of mass 176	4.1	(7.5) ²

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

¹ Value in parenthesis is % mass 174.
² Value in parenthesis is % mass 176.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
H2O +5 gr Soil	5314	10-21-88	1:30 PM
STD D/L #5	5315	"	2:10 PM
STD D/L #4	5316	"	2:50 PM
STD D/L #3	5317	"	3:30 PM
STD D/L #2	5318	"	4:10 PM
STD D/L #4	5319	"	4:50 PM
STD D/L #2(.75)	5320	"	5:30 PM
H #1 1"	5321	"	6:10 PM
H #1 5'	5322	"	6:50 PM
H #1 10'	5323	"	7:30 PM
H #2 1'	5324	"	8:10 PM
H #2 5'	5325	"	8:50 PM
H #2 10'	5326	"	9:30 PM
H #3 1'	5327	"	10:10 PM
H #3 5'	5328	"	10:50 PM
H #3 10'	5329	"	11:30 PM
H #3 1' Spiked	5330	10-22-88	12:30 AM

FORM V

**Initial Calibration Data
Volatile HSL Compounds**

Case No: Lab. # J8570-128 to 136

Instrument ID: GC/MS

Laboratory Name Standards/Dept of General Services

Calibration Date: 10-21-88

Minimum \overline{RF} for SPCC is 0.300
(0.25 for Bromoform)

Maximum % RSD for CCC is 30%

Laboratory ID								
Compound	RF ₂₀	RF ₅₀	RF ₁₀₀	RF ₁₅₀	RF ₂₀₀	\overline{RF}	% RSD	CCC- SPCC**
Chloromethane								..
Bromomethane								
Vinyl Chloride								.
Chloroethane								
Methylene Chloride	5.1	7.5	5.2	2.7	5.9	5.3	46.0	
Acetone								
Carbon Disulfide								
1, 1-Dichloroethene								.
1, 1-Dichloroethane	14.3	38.6	44.4	62.3	25.3	37.0	70.1	..
Trans-1, 2-Dichloroethene								
Chloroform	30.0	43.4	31.1	52.9	52.7	42.0	37.5	.
1, 2-Dichloroethane								
2-Butanone								
1, 1, 1-Trichloroethane	0.6	1.0	1.7	3.2	4.4	2.2	103.5	
Carbon Tetrachloride								
Vinyl Acetate								
Bromodichloromethane								
1, 2-Dichloropropane	220.7	24.0	29.9	39.1	35.8	69.9	170.9	.
Trans-1, 3-Dichloropropene								
Trichloroethene	2.2	4.3	2.3	4.7	4.7	3.6	49.8	
Dibromochloromethane								
1, 1, 2-Trichloroethane								
Benzene	1.7	1.9	4.0	5.3	6.3	3.8	75.6	
cis-1, 3-Dichloropropene								
2-Chloroethylvinylether								
Bromoform	0.6	2.2	1.0	1.5	1.1	1.3	68.9	..
4-Methyl-2-Pentanone								
2-Hexanone								
Tetrachloroethene	0.03	0.08	0.18	0.28	0.36	0.18	103.5	
1, 1, 2, 2-Tetrachloroethane	0.65	1.68	1.17	1.51	1.16	1.23	45.3	..
Toluene	5.3	3.4	7.7	13.1	15.0	8.9	79.1	.
Chlorobenzene	3.5	5.8	7.4	9.2	9.7	7.1	50.7	..
Ethylbenzene	0.27	0.95	2.24	2.07	4.36	1.98	111.3	.
Styrene								
Total Xylenes	1.53	3.41	4.51	6.00	5.50	4.19	60.35	

RF - Response Factor (subscript is the amount of ug/L)
 \overline{RF} - Average Response Factor
 %RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (.)
 SPCC - System Performance Check Compounds (..)

Form VI

SOIL SURROGATE PERCENT RECOVERY SUMMARY

Case No. Lab # J8570-128 to 136 Laboratory Name Standards/Dept. of General Services

SAMPLE NO.	VOLATILE			SEMI-VOLATILE						PESTICIDE		
	TOLUENE-00 (81-117)	BFB (74-101)	1,2 DICHLORO-ETHANE-04 (70-121)	BRO- BENZENE-05 (73-120)	2-FLUORO-BIPHENYL (30-118)	TERPHENYL-014 (18-127)			PHENOL-05 (74-113)	2-FLUORO-PHENOL (25-101)	2,4,6 TRIBROMO-PHENOL (18-122)	DIBUTYL-CHLOROPHATE (70-120)
128	101.6	114.6	19.0*									
129	116.0	122.2*	19.2*									
130	103.4	116.0	22.4*									
131	95.4	114.4	20.4*									
132	104.8	99.8	18.8*									
133	85.6	104.0	18.6*									
134	87.2	111.6	19.8*									
135	105.8	115.2	20.2*									
136	89.6	111.6	19.2*									
Spike	93.8	69.6*	16.6*									

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VALUES ARE OUTSIDE OF REQUIRED QC LIMITS

Volatiles: 12 out of 30 ; outside of QC limits
 Semi-Volatiles: _____ out of _____ ; outside of QC limits
 Pesticides: _____ out of _____ ; outside of QC limits

Comments: _____

